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ABSTRACT

This exploratory study describes a sample of teacher-pupil interactions in a high school containing a large number of at-risk students. The study was also initiated to contrast a group of mentor teachers with nonmentor teachers in terms of teacher-pupil rapport. Mentors were chosen from a pool of volunteers by the school principal and a committee. Teacher-student rapport, one of the variables associated with at-risk status, was examined as a classroom condition of learning necessary to enhanced feelings of membership in the group. Observation of mentor and nonmentor teachers over a 3-day period in May focused on teacher-student interactions and on teacher actions likely to enhance student engagement and sense of class membership. Characteristics of high- and low-rapport classes are described; differences among teachers are identified and exemplified with anecdotal data. (JD)

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A Contrastive Study of Mentor and Nonmentor Teachers in Their Interactions With At-Risk Students

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Presented at the Annual meeting of the
American Educational Research Association
Boston, MA

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A Contrastive Study of Mentor and
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Objectives

The purposes of this exploratory study were (1) to describe a sample of teacher-pupil interactions in a large urban high school containing a large number of at-risk students, (2) to contrast a group of mentor teachers with nonmentor teachers in terms of teacher-pupil rapport, and (3) examine teacher efforts to enhance student engagement with learning activities and membership in the group. Differences in behaviors identified during the first year of a multi-year project can indicate avenues for further exploration during the subsequent years and eventually provide suggestions for further training teachers to work more effectively with at-risk students.

Perspectives

The Classroom Management and Discipline Program* at Southwest Texas State University and a large urban school district in Texas secured a federal grant to design and implement a multidimensional program for at-risk youth. Among other components, the program increased support staff in the target high school, initiated child care for student parents, and facilitated closer interactions between the high school and feeder schools. In addition, teachers in the high school were asked to serve as mentors who would assume new roles and responsibilities with at-risk students. According to the grant application, mentors were to be chosen through student nominations. The choice of mentors by student nomination rested on the assumption that a student would nominate teachers on the basis of rapport between the student and those teachers. This study attempts to examine the differences among mentors and nonmentors in terms of rapport and to examine their classroom teaching practices for evidence to support students' expectations for positive classroom experiences. The importance of positive interpersonal relations with at-risk students is widely supported in the literature (Cuban, 1989; Firestone, 1989; Hamby, 1989); however, little work has been done to investigate the specific teacher behaviors which contribute to positive classroom rapport with at-risk students.

Background

Scope of the Problem. There is little dispute that public schools face public pressure to improve and expand services to at-risk/dropout students. The United State General Accounting Office (1986) reports a national dropout rate of 14% for youth age 16-19. The dropout rate in Texas for the 1987-88 school (the most recent data publicly

*This research was supported by the Classroom Management and Discipline Program at Southwest Texas State University.

reported) was 6.4% (Texas Education Agency, 1989). While already disturbingly high, these numbers are likely to increase according to recent projections. Pallas, Natriello, and McDill (1989) report U. S. Census Bureau projected increases in population associated with being educationally disadvantaged: minority racial/ethnic group identity, living in a poverty household, living in a single-parent home, having a poorly educated mother, and having a non-English language background. These authors consider "at-risk" children to be included in the designation "educationally disadvantaged."

It is clear that public pressure to better meet the needs of this population will intensify given these demographic projections. Costs to society of large numbers of drop outs are difficult to determine; however, by one estimate, the cost to the nation of the 500,000 students per year who dropout is $50 billion in lost lifetime earnings (Pallas, Natriello, & McDill, 1989). The U. S. General Accounting Office (1986) estimated that 1980 male high school graduates earned $1600 more during 1981 than male dropouts. The disparity between earnings for graduates and dropouts has continued to increase: in 1966 the difference was 12%; in 1978 the difference was 24% (U. S. General Accounting Office, 1986). The costs of dropouts to society in terms of welfare payments, poor health, and crime are difficult to estimate. They must, however, be very high.

Definitions. The Texas State Board of Education defines a dropout as a student who has been absent for a period of 30 or more consecutive days without approved excuse or documented transfer from the public school of enrollment, or a student who has failed to reenroll during the first 30 consecutive days of a semester without completing the high school program (Texas Education Agency, 1989). The United State General Accounting Office defines dropouts as persons who are neither enrolled in school nor are high school graduates (U. S. General Accounting Office, 1986).

The "at-risk" student has also been defined in more than one way. According to Reynolds (1989), at-risk refers to "children who fall into various categories for which the base rates (or group frequencies) for experiencing educational difficulties are relatively high." These categories include, for example, migrant lifestyle and learning disabilities. In a recent study of at-risk students conducted by Phi Delta Kappa, a broad definition of at-risk was used: students were considered at-risk if they were likely "to fail either in school or in life" (Frymier & Gansneder, 1989). Wehlage (1989), defines at-risk as a description of a wide range of students who suffer from problems, like weak academic skills, which interfere with their success in school.

The factors related to at-risk status have been organized in several ways: one of the most useful is that developed by Wehlage (1989). He established three factor groups: family background, personal problems, and school problems. Catterall (1987) reports a slightly different scheme: family background (e. g., SES), school context (e. g., academic track, peer group), and in-school performance (e.g., grades). The

comprehensive nature of the CMDP-local district program addresses in some way each of these categories; from collecting information on family background to tracking student achievement while in the at-risk program.

Family background factors often associated with the at-risk student include: limited life experiences, a language other than English spoken in the home, minority group membership, single-parent home, high mobility (student attends 3+ school within 5 years), physical or sexual abuse, low socioeconomic status, low status parent occupation/low education level, dropouts in family, large family size, and family health/marital status (Frymier & Gansneder, 1989; Gastright, 1989; Pallas, Natriello, & McDill, 1989; Reynolds, 1989; U. S. General Accounting Office, 1986; Wehlange, 1989;

Personal characteristics commonly associated with the at-risk student are: physical or mental health limitations, primary language other than English, drug or alcohol abuse, low self-esteem, learning disability, pregnancy/motherhood, and holding a job (Doyle, 1989; Frymier & Gansneder, 1989; Gastright, 1989; Pallas, Natriello, & McDill, 1989; Reynolds, 1989; U. S. General Accounting Office, 1986; Wehlage, 1989).

School context variables identified in the literature as related to at-risk students are: large school size, nonacademic track, nonparticipation in extracurricular activities, fear of violence, dropouts in peer group, teacher and principals perceived as nonsupportive/alienated (Catterall, 1987; Firestone, 1989; Frymier & Gansneder, 1989; Gastright, 1989; U. S. General Accounting Office, 1986).

Finally, school performance/attitude variables related to at-risk status are: low grades, excessive absences, failure of graduation tests, social behavior in conflict with teacher or peers, suspensions, negative response to instruction, low standardized test scores, course failure, negative attitude toward school, and retention in grade (Bishop, 1989; Caterall, 1987; Doyle, 1989; Frymier & Gansneder, 1989; Gastright, 1989; Grissom & Shepard, 1989; Reynolds, 1989; Rice, Toles, & Schulz, 1989; Slavin & Madden, 1989; U. S. General Accounting Office, 1986; Wehlage, 1989). Retention has been consistently found to be an extremely powerful predictor of moving from at-risk to dropout status (Grissom & Shepard, 1989; Slavin & Madden, 1989). In the Grissom & Shepard study of four school districts, students who were retained in one grade were 27%, 17%, 17% and 18%, respectively, more likely to drop out than those who were not retained.

Responses to at-risk students. Given the variety and severity of these factors, strong responses are necessary to prevent the at-risk population from failing to graduate. The literature contains many descriptions of successful programs to address this problem--programs which address one or more of the following sets of factors: personal characteristics, family background, social context, and school performances/attitudes.

As would be expected, most responses anchored in the public school setting are directed at those factors most susceptible to intervention by the school--school performances/attitudes and social context variables.

In response to the needs of the at-risk student, fundamental changes in the functions of the school are needed. School must refocus from sorting and selecting students to teaching and learning for all students (Canady & Hotchkiss, 1989). Some programs functioning now toward this end contain features identified as "successful": flexibility, personalized instruction, committed staff, and classroom communities (Cuban, 1989). Bishop (1989) emphasizes that programs for at-risk students must recognize and reward their efforts and achievements while Firestone (1989) suggests that effective programs emphasize mutual respect between students and teachers, make curriculum more relevant for students, and support teacher professionalism. The successful school program motivates the students to complete school, increases their desire to learn, builds self-esteem, and enhances academic performance (Cuban, 1989). In essence, the successful at-risk program, according to Gastright (1989), must seek to improve the social relations within the school and enhance the relevance of the curriculum the students are asked to complete, i.e., promote "membership" in the school and "engagement" in schoolwork.

While teacher-student rapport is only one variable among the myriad associated with at-risk status, it is one of the few open to direct teacher intervention. This study examined that rapport as a classroom condition of learning necessary but not sufficient to enhanced feelings of membership in the group. This study also sought evidence of teacher actions which would logically be intended to relate the curriculum to students' lives for the purpose of increased engagement.

Site and Sample Description

Twenty teaches volunteered to participate in the classroom observation project. Those volunteers represented two groups, mentors and nonmentors, and from each group five teachers were randomly selected to participate in the study. The final sample consisted of 10 females; 7 Black, 1 Hispanic, and 2 Anglo.

Approximately one-half the student body of the high school is considered at-risk by the official state definition; essentially all classes contain at-risk students. Of the 400 students served in the at-risk program, 61% are males; 76% are Black, 19% are Hispanic, and 5% are Anglo. These figures closely reflect the overall campus population. Of the students served in the at-risk program, ninth graders are heavily represented with 50% repeating the ninth grade.

Data Sources

The principal investigator for this study conducted observations without knowledge of the status of the classroom teacher as a mentor or nonmentor. For each observation a narrative record was created. Those records captured teacher-student exchanges, teacher comments, directions, presentation of lessons, and administrative directions, student questions, and a physical description of the classroom. A code number was assigned to each participant by the overall project director in order to protect the anonymity of each participant.

In addition, the Pupil-Teacher Rapport Scale (Wrightstone, 1951) was also completed for each observation. This scale produced a rating for each teacher based upon observer perceptions about the following categories: pupil-teacher interaction pattern; degree of social interaction; quality of social interaction; interest; enjoyment; role structure; emotion of teacher; teacher orders or suggestions; physical tension of group; and emotion of pupil group. As reported in Borich (1977), the scale appears to have sufficient evidence of validity and reliability for use in an exploratory study.

Methods

Each teacher participating was told that this study was a part of the at-risk project and that the classroom observer would be focusing upon classroom instruction. It was thought that a more specific statement would be likely to bias the participants. Each teacher was observed by the principle investigator teaching the same subject to two different class periods. Observations were conducted over a three-day period in May at the end of the first year of project implementation. In no case did the two observations for each teacher occur on the same day.

A mean rating was determined for each teacher on the Pupil-Teacher Rapport Scale. In order to identify as clearly as possible differences among teachers in terms of pupil-teacher rapport, teachers were placed in rank order based upon the mean ratings and the two teachers at each extreme identified. For these two pairs, the ratings that each teacher received on the categories were examined for patterns across the two groups. Due to the small sample and the exploratory nature of the study, quantitative analysis for differences in mean scores were not conducted; instead the scale was used to provide focus and organization for the qualitative data and the ratings to suggest likely areas of differences for future studies.

Each narrative record was qualitatively analyzed to describe interactions between the teacher and students in the class. The analysis specifically focused upon teacher actions likely to enhance student engagement and membership. The principal investigator analyzed data without knowledge of the teacher's condition as a mentor or nonmentor.

Results

Pupil-Teacher Rapport Scale. Mean ratings on the rapport scale ranged from 21.5 to 35 out of a possible score of 45. The teacher pair at the low end received mean ratings of 21.5 and 28; teachers at the high end received 35 and 32.5. Examination of the categories on the scale identified five with no overlapping ratings between the high and low pairs. These were quality of social interaction; interest; enjoyment; physical tension of the group; and emotion of the pupil group.

Classrooms of the higher scoring teachers were clearly different in terms of:

1. *Quality of Social Interaction* with these classrooms displaying more willingness to cooperate and share ideas;
2. *Interest* with more evidence of students' attending to the teacher and the task at hand;
3. *Enjoyment* with students showing some signs of pleasure in the class;
4. *Physical Tension of the Group* where students exhibited a mild to moderate level of tension, and;
5. *Emotion of Pupil Group* where students displayed pleasant and respectful attitudes toward the teacher who reacted with some spontaneity with the group.

These classes were brisk and businesslike with students highly engaged. Teachers elicited many comments from students without any hint of condescension for students or their abilities. Comments and questions were phrased in terms such as, "Let's see what you can do," and "What method do you want to use? ... That's the right idea. Now how did you get that? Let me see a first step." Clearly the teacher acknowledged the students ability for the task at hand while continuing to probe for deep understanding.

Classrooms of the lower scoring teachers were characterized as

1. less warm and more competitive;
2. exhibiting more signs of boredom and wandering attention;
3. displaying fewer signs of enjoyment;
4. very relaxed to the point of physically "taking-it-easy"; and
5. respectful but with little sign of expression.

These classes replicated the teacher-centered instructional pattern generally evident in the comparison classes; differences appeared to develop from unsuccessful attempts by the teacher to relate to the class. These attempts were interpreted by students as belittling or inappropriate. Teacher comments like, "I told you it'd go fast this week," and, "Was the work easy?...Your writing is so good. I see some beautiful circles," were often met with silence, giggles, and glances exchanged behind the teacher's back. In other cases, class activities were structured so that student interest was quickly lost: copying five pages of notes from an overhead projector while the teacher commented on additional material.

Classroom Observations. The observation narratives were analyzed for evidence of teachers' efforts to enhance students' feelings of membership in the class and to increase engagement with learning activities (Gastright, 1989). The concept of membership involves students perceptions of belonging to the school and the classroom and acceptance there by teachers, administrators and other students. The concept of engagement goes beyond the common definition of academic engagement and time on task to include the idea of curriculum relevance. Successful at-risk programs attempt to draw closer connections between the world of work and the world of school, to make the time lag between reinforcement for school success, actually or perceptually, briefer. The net effect is to motivate students toward engagement with learning activities.

High Rapport Classes and Membership. These classes were characterized by affective messages sent by the teachers and received by students in the manner intended by the teachers. When these teachers included a student name in an example or"kidded" a student, the student involved and others in the class did not laugh at the student or the teacher, but enjoyed the teacher's attention and comments. There was, without exception, congruence between the teachers' intended communications and reception by the classes. It appeared that these affective messages were intended to establish rapport between the teacher and individual and the class as a whole. To the extent that rapport was established, students appeared to be comfortable with the teacher and the rest of the class.

Another commonality between these high rapport classes, was the resolution of the situation where students appeared in class without supplies necessary to complete class activities. In the first class the Teacher 1 reacted immediately and to make sure the student secured paper, pen, book, or whatever was needed to participate in the class. This was done without calling undue attention to the student or the situation. That teacher maintains loaner pencils and paper for sale at a nominal amount per sheet and supplied these without judgmental statements. The message was to get on to more important, interesting things without wasting time on this inconvenience. In the second class, the student borrowed a sheet of paper from another student without interrupting Teacher 2 or the class and then settled down to work immediately. The implication here was that one was expected to participate and getting one's act together could be handled without depending on the teacher's attention. These teachers averaged 13 and 7 affective statements, respectively, over the two observations.

High Rapport Classes and Engagement. The social studies teacher, Teacher 1, made an average of 5 statements which combined attention to relevance of the curriculum and to membership. She continually integrated the class discussion of the day's topic with how the students use that concept now or might use it in later life. Her examples were high interest examples--clothing, cars, advertising campaigns, and so forth; her discussions were focused but wide-ranging--discrimination, monopolies, computer manufacturing,

treatment of the handicapped. She paid much attention to students' general knowledge of the world--using terms from classes taken in previous years and jogging memories when students misapplied those terms. The implication is that she wanted students to know how things operate and how one gets invited to play the game out in the real world.

The math class taught by Teacher 2 contained no explicit references to the relevance of the topic to the outside world. The teacher seemed to depend upon the inherent mystery of the subject to hold attention and academic engagement. She treated problems as puzzles waiting for students to discover the answers through reasoning and work under her guidance. She depended upon students to determine the processes to use, which option to try next, which step to perform next, and, as a consequence, had high group and individual task engagement. Students appeared to be successful and showed no frustrations. Her class was very businesslike, with little time wasted by any student.

Low Rapport Classes and Membership. These classes were characterized by numerous affective messages sent by the teacher (Teacher 3, math) but not received by students in the intended manner or by very few affective messages (Teacher 4, social studies). In the first case the Teacher 3 sent what she meant to be positive messages (an average of 22.5) and students perceived them negatively--snickering and exchanging meaningful glances behind her back. In the other case Teacher 4 sent negative messages (an average of 4.5 negative messages). While the words used often were the same or very similar to words used in the high rapport classes, what was noticably different was the manner in which they were delivered. Teacher 3 tended to speak to these high school students in a positive manner; however, they interpreted her comments as juvenile and inappropriate, e.g., spoken praise for individuals for minor accomplishments delivered in an artificial voice tone. Teacher 4 sent negative messages not so much through specific words but in her sarcastic manner of speaking to and glaring at the object of her message.

In Teacher 3's class, students without supplies never secured supplies, nor was there evidence that the teacher was aware that they were without paper and pencil. These students never became even minimally engaged with the assigned task. Students in Teacher 4's class also sat without supplies and did not become engaged with the task at even the minimal level of copying notes.

Low Rapport Classes and Engagement. No evidence was found of successful efforts towards enhanced engagement from either teacher. Teacher 3 made no attempts to anchor the subject in daily application or future application. The class displayed low productivity. Students feigned lack of understanding so that the teacher would reveal her own work which they proceeded to copy against her wishes and admonitions. In this class the teacher was also manuevered into working much of the classwork and homework for the class. In Teacher 4's class, several attempts to engage students in dialogue about current applications of lesson topics were made without success. This was due primarily

to the teacher's practice of writing notes on transparencies and displaying those for students to copy while the teacher gave new information, commented on information on the overhead, and asked questions of students engaged with copying notes from the overhead. As in the class of Teacher 3, the work in this class was done by Teacher 4: she produced notes on material to be covered, students were left to copy information.

Identification of Mentors

After the analysis was completed, the project director was contacted and the mentor/nonmentor status of the participants revealed to the principal investigator. Each extreme pair consisted of a mentor and nonmentor combination. The principal of the school was contacted to confirm the selection process of mentors. According to the principal, the time constraints placed upon the project precluded using student nominations to select mentors. As an alternative, a committee composed of the principal, assistant principals, the school nurse, counselors, and the registrar made selections from a pool of volunteers. The selections were based upon, in addition the volunteering, the (1) availability of the teacher to meet with students before or after school, (2) skill in conferencing with parents, (3) ability to make students feel comfortable, (4) seniority and position in the building.

Based upon the actual selection process and criteria, the failure of this exploratory study to identify consistent differences in rapport between mentors and nonmentors is not surprising. In fact, the criteria most closely related to rapport, ability to make students feel comfortable, was one of a set of criteria and not the primary criteria.

Limitations

The planned comparison of mentors and nonmentors was not feasible given the deviation from project proposal. While the principal investigator intended to conduct the study blind to the mentor status of the sample, one teacher proudly announced her status during the first observation. Because of the small sample size, both observations were conducted and analyzed for that teacher. Her scores placed her in the middle of the score distribution and further analysis was conducted using the extreme pairs of teachers. In addition, the study was conducted over a brief period of time (3 days) and may have sampled an a typical segment of school life; students and teachers were facing end of school achievement tests within weeks. Finally, the data were collected and analyzed by one researcher. Although this researcher has had extensive experience training observers in three states for various research and evaluation studies, the potential for baised observation and analysis still exists.

Educational Significance

This small study provides evidence for the appropriateness of this combined qualitative and quantitative methodology to this describe classroom interaction patterns; differences among teacher were identified and exemplified with anecdotal data from the classroom narratives. This study further illustrates the difficulties of conducting classroom based research within the context of the real school environment. Clearly, further research is needed to determine the effectiveness of the actual, rather than the intended, selection criteria used for identify mentors in this at-risk program.

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